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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,700	11/25/2003	Loucas Tsakalakos	139081-1	9948

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GENERAL ELECTRIC COMPANY (PCPI)
C/O FLETCHER YODER
P. O. BOX 692289
HOUSTON, TX 77269-2289

EXAMINER

STADLER, REBECCA M

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/722,700

Applicant(s)

TSAKALAKOS ET AL.

Examiner

Rebecca M. Stadler

Art Unit

1754

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 16 June 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☒ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See continuation sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 30,32-52,54 and 55.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See continuation sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☐ Other: _____.

Continuation of 3: The proposed amendment adds the limitation of a "conductive" epitaxial buffer layer, which was not previously presented in any of claims that depended from claim 30. As such, this limitation raises new issues that would require further consideration and possibly a further search.

Continuation of 11:

Regarding applicant's argument that Xu teaches away from a conductive layer, the passage at column 6, lines 16-20 reads: "Although conductive, the growth layer may have some resistance to regulate emission current." The Examiner treats this passage as meaning that the layer is conductive, but that the layer has some level of resistivity in order to regulate the electric current. It is stressed that the layer is not fully resistive, rather the layer may have some resistivity. In a field emitter device it would be desirable to have some resistivity in order to regulate the electric current so that the electric current is not too high. Applicant argues as though the claim reads: "fully conductive." Rather, the claim merely requires that the epitaxial buffer layer be conductive, the layer in Xu is conductive as evinced by the passage above.

Regarding applicant's argument that Xu does not teach a conductive platform, even taking the entire specification into consideration, there is nothing in the specification to suggest that Figure 4 is "to scale." Xu teaches a metal catalyst film, which is considered to be a "platform" because it is raised off the substrate, it will facilitate nanotube growth, it will raise the level of nanorods closer to the gate opening. This is especially true considering that the invention is on the nanoscale. Even raising the nanorods by 1 nm will have a difference in the very small-scale field emitter device. Ultimately, the metal catalyst film of Xu meets the claim limitations, even if Xu placed the film there for different reasons. Claim 44 recites a conductive platform having a top surface, disposed on the top side of the substrate within the cavity and has a nanorod affixed to the top surface. The metal catalyst film of Xu has a top surface, it is disposed on the top side of the substrate within the cavity and has a nanorod affixed to the top surface. Again, applicant argues as though a size or thickness limitation is recited. If there is a criticality to the size, thickness, or composition of the conductive platform, the Examiner suggests adding these limitations to the claim, upon the filing of an RCE because otherwise it would raise a new issue.

Wayne A. Langel
WAYNE A. LANGEL
PRIMARY EXAMINER